ENHANCED ENGLISH ABSTRACT FOR DD279486

1 / 1 WPAT - ©Thomson Reuters

Derwent Accession :
1990-335552 [45]

CPI Accession :
C1990-145639

Title :
Activation of hydroxylic polymers by reaction with carbonate or chloro:formate ester in presence of amine

Derwent Class :
A96 B04 D16

Patent Assignee :
(DEAK) AKAD WISSENSCHAFTEN DDR

Inventor :
BECKER M; BOEDEN HF; BUTTNER D; BUTTNER W

Nbr of Patents :
1

Nbr of Countries :
1

Patent Number :
DD-279486 A 19900606 DW1990-45 Ger *
AP: 1986DD-0287730 19860310

Priority Number :
1986DD-0287730 19860310

Intl Patent Class :
C08B-031/06; C08B-037/02; C08B-005/00; C08F-008/14; C08G-065/48; C08J-007/12; C08B-031/00; C08B-037/00; C08F-008/00; C08G-065/00; C08J-007/00

Advanced IPC (V8) :
C08B-031/06 [2006-01 A - I R - -]; C08B-037/02 [2006-01 A - I R - -]; C08B-005/00 [2006-01 A - I R - -]; C08F-008/14 [2006-01 A - I R - -]; C08G-065/48 [2006-01 A - I R - -]; C08J-007/12 [2006-01 A - I R - -]

Core IPC (V8) :
C08B-031/00 [2006 C - I R - -]; C08B-037/00 [2006 C - I R - -]; C08B-005/00 [2006 C - I R - -]; C08F-008/00 [2006 C - I R - -]; C08G-065/00 [2006 C - I R - -]; C08J-007/00 [2006 C - I R - -]

Abstract :
DD-279486 A
Activation of OH-contg. polymers is effected by reaction with a cpd. (II) selected from carbonate esters of formula RO-CO-OR (IIa) where R is an electron-withdrawing gp. chloroformate esters of formula ClCOOR (IIb) and prods. (IIc) obtd. by reacting COCl2 with a phenol or N-substd. hydroxylamine. The reaction is effected at 0-100 deg.C in an anhydrous organic solvent in the presence of a 'Supernucleophilic' amine (III) capable of forming reactive acylium salts, and opt. a strongly basic tert amine (IV). More specifically, (IIa) and (IIb) have R = succinimidyl, phthalimidyl 5-norbornene-2,3-dicarboxyimidyl or p-nitrophenyl. (IIc) is prepd. by reacting COCl2 with ROH. (III) is 4-dimethylaminopyridine (DMAP), 4-pyrrolidinopyridine (PPY) N-methylimidazole, diabicyclo (5,4,0) undecene (DBU), 4-morpholinopyridine or diazabicyclo (2,2,2) octane (DABCO). (IV) is NEt3, N-methylmorpholine N,N-dimethylaniline, pyridine, picoline or N-methylpiperidine.
USE/ADVANTAGE: The process is esp. useful for activating cellulose, polysaccharide, polyethylene glycol or polyvinyl alcohol supports for use in the biotechnology, chemical and pharmaceutical industries, scientific research and clinical analysis. The process introduces carbonate ester gps. under mild conditions, giving high degrees of activation using only small amts of (II). @(12pp Dwg.No.0/0)

Manual Codes :
CPI: A10-E07A A12-V03C2 B04-C02A3 B04-C03B B12-K04 D05-A D05-H09 D05-H10

Update Basic :

1990-45